



## MASTER FILE

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Attn: Management Training Branch

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Subject: Observation of Update/Leave in Aguadilla, Puerto Rico

### INTRODUCTION

I went to observe Update/Leave (U/L) in Puerto Rico because I am evaluating the Update/Leave operation. It was thought that observing in the Aguadilla Local Census Office (LCO) region would give me a well-rounded picture of the operation in Puerto Rico, since there is a mix of urban and rural areas in this region.

### OBSERVATIONS

I observed this operation on March 23<sup>rd</sup> and 24<sup>th</sup>, which is near the end of the U/L operation in the field. In fact, this LCO was nearly finished with the field work at the time of my visit. I observed some of the final AAs being canvassed, and I was also shown some of the areas that had been problems during the operation.

Coincidentally, at the time I was visiting, there was a Censo 2000 publicity blitz in Aguadilla because of a Regatta being held there. My impression of the publicity activities was that they were both needed and valuable. In addition I heard Censo 2000 advertisements on the radio several times during my visit - another good choice, since the radio seemed to be turned on at all

times. I crossed paths with a number of census employees during my visit, both visiting partnership/publicity crew members and office and field staff. People seemed to be generally happy to be working on the census and were working hard to make it a good census. The LCO itself was a warehouse, but there appeared to be plenty of space.

On March 23<sup>rd</sup> I observed an enumerator finishing up an assignment area that consisted of a very large block with many dead-end streets. The previous day an enumerator had gone out and redone the map spots for this block. There were many housing units originally spotted on the wrong side of a street. They are not in the correct location for canvassing and are no longer in the correct block if a block is split. The block splitting that was done after Address Listing reportedly occurred frequently in this area. One of the biggest problems reported to me on both days was that housing units would end up in the wrong block during such a block split; this results in added and deleted questionnaires for each such unit. In fact this LCO had run out of questionnaires, particularly long forms, and there were reportedly no extra long forms anywhere else on the island. I don't know what the resolution to this problem was.

The biggest problem I saw during both days of my observation was the housing units in the wrong location on the maps. The Field Operations Supervisor (FOS) reported to me that many of the maps had "mirror image" problems, where a street added in Address Listing was digitized on the wrong side of the street, putting all its housing units in the wrong block. I was shown a number of maps with this problem. The protocol for handling this problem is a wholesale add and delete for every housing unit, which partially explains why Puerto Rico ran out of questionnaires. There were also entire blocks that presumably had been listed incorrectly in the first place, which contributed to the problem. I also was shown a block that had to be completely redone, and since it was redone entirely, they had started over with map spot number 1 instead of using the next highest map spot number. I believe it is not possible to process these adds correctly, since the registers are keyed and the maps scanned at different locations.

On the second day of my observation I was shown some of the map spotting problems in the rural areas. These regions were up in the hills and were reached by winding, one-lane roads. The land is attributed to the different surrounding towns, so it is important to get housing units in the correct block for this reason alone. Among the problems I was shown this day were blocks that were next to each other on the maps, but from the perspective of the top of a hill, the houses in those supposedly adjacent blocks are clearly nowhere near each other. In addition families often occupy an entire region, and the family names on the units in the wrong place didn't match. It is very difficult to find one's way around this area, and having the maps be completely wrong makes the operation quite complex. I was also shown an area in which all the houses appeared on the wrong side of a stream on the map, but the Crew Leader said they had all been listed correctly when she participated in Address Listing. Perhaps this error occurred during digitizing, but the houses were mapped as being right up next to the stream but across the stream from the nearest road, which doesn't make sense.

On this day I was also shown an AA that had been listed originally from the left instead of from

the right. Reportedly there had been some problems keeping listers employed in this Crew Leader District during the Address Listing operation, so the quality of that operation had suffered. This AA was a large block consisting of a number of streets that dead-ended at the beach, and many of the houses were seasonal. This lister was relisting the entire AA because it had been listed from the left, but I didn't see that this was necessary, as the housing units were otherwise in the correct place. Perhaps the perception that this assignment area needed to be redone arose from the experience of having so many areas that needed to be completely relisted and having a limited perspective on why particular problems required a rework.

I was told by the FOS that a recurring problem was when the same block appeared in two or three different AAs. I don't know if the AAs were not assigned uniquely or if the blocks were just digitized in additional places, but this problem leads to a number of deletes.

Houses with more than one story often contain more than one household, although it is often family members occupying both units. The default assumption when someone couldn't find anybody to verify the number of housing units at a two-story structure was that there were two housing units. This was correct quite often, but not always. It was also possible that a top story had been made uninhabitable by the most recent storm or hurricane. One unusual situation that showed up during my observation was that of a two-story house that also contained a basement apartment, but the basement apartment fronted the street in the rear of the house. This makes it a multi-unit structure, but you can't canvass both units in that order.

When a housing unit is listed on the register but the questionnaire for it is either messed up, missing, or of the wrong form type, and an enumerator must use an unlabeled questionnaire, the instructions tell the enumerators to write the housing unit ID above the bar code. However the bar code on the add questionnaires appeared beside the address area instead of on top of it, as shown in my manual. There was no place on the label to write the number on top of that. What they were doing in this LCO was tearing up a flap from the envelope to the left of the label and writing the number under that flap. Some of the public wondered then what the census bureau was doing trying to get into their questionnaires.

One recurring problem was with houses that the FOS knew were listed in Address Listing but that didn't show up on census materials. A Crew Leader said these houses had been in existence anywhere from eight to 20 years. They could not understand why these houses were not listed on their maps and registers. Again, this problem resulted in a large number of adds.

The Bureau had data transmission problems with the files from Address Listing in Puerto Rico. After that transmission it was impossible to separate the addresses from the descriptions, and so everything was merged into one field and assumed to be a description. However descriptions are not printed on questionnaire labels. I observed the operation in Puerto Rico to see how not having addresses on the questionnaires complicated the delivery process. It appeared that the first 30 characters of each of the mailing address and location description fields were used to create the 60-character address/location description. This resulted in descriptions on the register

like: "UN RD HSE ROSA Y VERDE" - (pink and green). Colors are not to be used as a description for a house, especially in Puerto Rico, where it is traditional to repaint the house at Christmastime. The staff I was with mentioned that it was unlikely that colors were the only thing that was submitted for a description. Reasonable descriptions would be "French windows", "balcony with arches" or "2 waters" (a peaked roof), which were all being added to the descriptions in this area. What this meant for this operation, where I saw very few mailing addresses, is that the enumerators were attempting to find housing units with no more information than house colors in a region in which the maps had serious and numerous errors. The result was that they ran out of add questionnaires. I believe this area will continue to provide challenges in Nonresponse Follow-up and in the Field Verification of Be Counted and Telephone Questionnaire Assistance forms. In fact, after seeing the materials and the area for myself, I believe that Update/Leave should not have been attempted once the problem with the Puerto Rico Address Listing data transfer occurred. List/Enumerate would probably have been a more effective enumeration method.

cc:

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